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GE HEALTHCARE c/o FLETCHER YODER, PC P.O. BOX 692289 HOUSTON, TX 77269-2289			MORGAN, ROBERT W	
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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES

6

7

8 *Ex parte* DANIEL I. KERPELMAN, RICHARD L. FROWEIN, HUBERT
9 ANTHONY ZETTEL, JAMES F. KOHLI, and JOHN M. HEINEN

10

11

12 Appeal 2009-0393
13 Application 09/470,344
14 Technology Center 3600

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17 Decided:¹ February 6, 2009

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20 Before ANTON W. FETTING, JOSEPH A. FISCHETTI, and BIBHU R.
21 MOHANTY, *Administrative Patent Judges*.

22

23 FETTING, *Administrative Patent Judge*.

24

25

26 DECISION ON APPEAL

27

28 STATEMENT OF THE CASE

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

1 Daniel I. Kerpelman, Richard L. Frowein, Hubert Anthony Zettel,
2 James F. Kohli, and John M. Heinen (Appellants) seek review under
3 35 U.S.C. § 134 of a final rejection of claims 1-3 and 5-60, the only claims
4 pending in the application on appeal.

5 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b)
6 (2002).

7
8 We REVERSE.

9 The Appellants invented a technique for exchanging information
10 within a medical facility via an improved topology linking various
11 equipment and networks into a data exchange infrastructure (Specification
12 1:6-10).

13 An understanding of the invention can be derived from a reading of
14 exemplary claim 1, which is reproduced below [bracketed matter and some
15 paragraphing added].

16 1. A medical facility data communications system, the system
17 comprising:
18 [1] an internal data communications network;
19 [2] a plurality of clients coupled to the internal network and
20 uniquely addressed on the internal network,
21 the clients include a plurality of medical diagnostic
22 imaging modalities configured to produce image data;
23 and
24 [3] a data communications control system coupled to the
25 internal network for
26 receiving client data from the clients,
27 transmitting client data to a remote service provider,
28 receiving addressed data from the remote service
29 provider, and
30 distributing the addressed data to the clients.
31

This appeal arises from the Examiner's Final Rejection, mailed July 24, 2007. The Appellants filed an Appeal Brief in support of the appeal on September 24, 2007. An Examiner's Answer to the Appeal Brief was mailed on December 11, 2007. A Reply Brief was filed on February 11, 2008.

PRIOR ART

7 The Examiner relies upon the following prior art:

§ DiRienzo US 6,006,191 Dec. 21, 1999

9

REJECTION

Claims 1-3 and 5-60 stand rejected under 35 U.S.C. § 103(a) as unpatentable over DiRenzo.

13

ISSUES

15 The issue pertinent to this appeal is whether the Appellants have
16 sustained their burden of showing that the Examiner erred in rejecting claims
17 1-3 and 5-60 under 35 U.S.C. § 103(a) as unpatentable over DiRenzo.

18 The pertinent issue turns on whether DiRienzo describes a plurality of
19 medical diagnostic imaging modalities coupled to a data communications
20 control system that are uniquely addressed on an internal network.

21

FACTS PERTINENT TO THE ISSUES

23 The following enumerated Findings of Fact (FF) are believed to be
24 supported by a preponderance of the evidence.

25 DiRienzo

- 1 01. DiRienzo is directed to directing diagnostic medical images
- 2 from patients to diagnostic physicians while producing
- 3 decentralized diagnostic medical image distribution with control
- 4 totally in the hands of the patients and the providers (DiRienzo
- 5 1:13-18).
- 6 02. DiRienzo identifies what a modality is in the context of medical
- 7 imaging. DiRienzo describes that modalities are diagnostic
- 8 instrumentalities to aid the physician in identification of the
- 9 patient's medical problem. These modalities include X-Ray,
- 10 EKG, EEG, MRI, CT, NM, PET, blood tests, microscope images,
- 11 etc. Each of these modalities produces a characteristic diagnostic
- 12 medical image (DiRienzo 2:11-16).
- 13 03. DiRienzo portrays the network for its system in Fig. 3, which
- 14 illustrates a clearinghouse computer (CHC) connected to an
- 15 imaging center by a communication link that may be a local area
- 16 network or metropolitan area network. The CHC is also
- 17 connected to a physician and gatekeeper computer by modem
- 18 linked communication channels (DiRienzo 18:37 – 19:64).

19 *Facts Related To Differences Between The Claimed Subject Matter And*
20 *The Prior Art*

- 21 04. DiRienzo does not describe multiple medical diagnostic
- 22 imaging devices connected in an internal network, but only shows
- 23 an imaging center connected to a clearinghouse computer.
- 25 05. DiRienzo does not describe a data communications control
- 26 system that distributes data to individually addressed clients in an
- 27 internal network from a remote system.

1 *Facts Related To The Level Of Skill In The Art*

2 06. Neither the Examiner nor the Appellants has addressed the level
3 of ordinary skill in the pertinent arts of systems analysis and
4 programming, medical diagnostic system design, digital network
5 design, or digital communication control systems design. We will
6 therefore consider the cited prior art as representative of the level
7 of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d
8 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings
9 on the level of skill in the art does not give rise to reversible error
10 ‘where the prior art itself reflects an appropriate level and a need
11 for testimony is not shown’”) (quoting *Litton Indus. Prods., Inc. v.*
12 *Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

13 *Facts Related To Secondary Considerations*

14 07. There is no evidence on record of secondary considerations of
15 non-obviousness for our consideration.

16

17 PRINCIPLES OF LAW

18 *Claim Construction*

19 During examination of a patent application, pending claims are
20 given their broadest reasonable construction consistent with the
21 specification. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969); *In*
22 *re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

23 Limitations appearing in the specification but not recited in the claim
24 are not read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d
25 1364, 1369 (Fed. Cir. 2003) (claims must be interpreted “in view of the

1 specification” without importing limitations from the specification into the
2 claims unnecessarily).

3 Although a patent applicant is entitled to be his or her own
4 lexicographer of patent claim terms, in *ex parte* prosecution it must be
5 within limits. *In re Corr*, 347 F.2d 578, 580 (CCPA 1965). The applicant
6 must do so by placing such definitions in the specification with sufficient
7 clarity to provide a person of ordinary skill in the art with clear and precise
8 notice of the meaning that is to be construed. *See also In re Paulsen*, 30
9 F.3d 1475, 1480 (Fed. Cir. 1994) (although an inventor is free to define the
10 specific terms used to describe the invention, this must be done with
11 reasonable clarity, deliberateness, and precision; where an inventor chooses
12 to give terms uncommon meanings, the inventor must set out any
13 uncommon definition in some manner within the patent disclosure so as to
14 give one of ordinary skill in the art notice of the change).

15

16 *Obviousness*

17 A claimed invention is unpatentable if the differences between it and
18 the prior art are “such that the subject matter as a whole would have been
19 obvious at the time the invention was made to a person having ordinary skill
20 in the art.” 35 U.S.C. § 103(a) (2000); *KSR Int'l Co. v. Teleflex Inc.*, 127 S.
21 Ct. 1727, 1729-30 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14
22 (1966).

23 In *Graham*, the Court held that the obviousness analysis is bottomed
24 on several basic factual inquiries: “[1] the scope and content of the prior art
25 are to be determined; [2] differences between the prior art and the claims at
26 issue are to be ascertained; and [3] the level of ordinary skill in the

1 pertinent art resolved.” 383 U.S. at 17. *See also KSR*, 127 S. Ct. at 1734.
2 “The combination of familiar elements according to known methods is likely
3 to be obvious when it does no more than yield predictable results.” *Id.* at
4 1739.

5 “When a work is available in one field of endeavor, design incentives
6 and other market forces can prompt variations of it, either in the same field
7 or a different one. If a person of ordinary skill can implement a predictable
8 variation, § 103 likely bars its patentability.” *Id.* at 1740.

9 “For the same reason, if a technique has been used to improve one
10 device, and a person of ordinary skill in the art would recognize that it would
11 improve similar devices in the same way, using the technique is obvious
12 unless its actual application is beyond his or her skill.” *Id.*

13 “Under the correct analysis, any need or problem known in the field
14 of endeavor at the time of invention and addressed by the patent can provide
15 a reason for combining the elements in the manner claimed.” *Id.* at 1742.

16 ANALYSIS

17 *Claims 1-3 and 5-60 rejected under 35 U.S.C. § 103(a) as unpatentable over
19 DiRienzo.*

20 The Appellants argue independent claims 1, 17, 32, 46, and 55 as a
21 group. Accordingly, we select claim 1 as representative of the group.
22 37 C.F.R. § 41.37(c)(1)(vii) (2007).

24 The Examiner found that DiRienzo described the limitation of claim
25 1, except that it did not explicitly refer to a data communications control
26 system. The Examiner found that DiRienzo’s description of the
27 transmission of data between a medical diagnostic facility and a

1 clearinghouse computer (a remote provider) via a network required a
2 network/communication interface, which is the recited data communication
3 control system, and that one of ordinary skill knew that such a control
4 system assisted in the transmission process by facilitating the reliability of
5 physician accessing and reviewing patient data (Answer 3-4).

6 The Appellants contend that DiRienzo does not describe a plurality of
7 medical diagnostic imaging modalities coupled on an internal network (Br.
8 13: ¶ 1); or a data communications control system (Br. 15: ¶ 2).

9 We agree with the Appellants. The Appellants contend that DiRienzo
10 fails to teach or suggest a plurality of medical diagnostic imaging modalities
11 coupled to and uniquely addressed on an internal network. Instead,
12 DiRienzo only addresses the acquisition of images from health care facilities
13 and by no means discloses a network of medical diagnostic imaging
14 modalities (Br. 13: Bottom ¶).

15 To respond to this we must first construe what a modality is. The
16 Specification provides no definition. DiRienzo however, as a prior art
17 reference portraying the knowledge in the art of medical diagnostic imaging,
18 provides an interpretation. DiRienzo describes that modalities are diagnostic
19 instrumentalities to aid the physician in identification of the patient's medical
20 problem, such as X-Ray, EKG, EEG, MRI, or CT. Each of these modalities
21 produces a characteristic diagnostic medical image (FF 02).

22 The Examiner found that DiRienzo portrayed the internal network in
23 limitation [2] in DiRienzo's Fig. 3, and taught that many diagnostic
24 instrumentalities produce diagnostic medical images. The Examiner inferred
25 from this that the physician's office and gatekeeper's office in DiRienzo Fig.
26 3 would have multiple medical diagnostic imaging modalities (Answer 3-4).

1 The Examiner went on to find that because DiRienzo describes several
2 different types of networks, that might connect the clients in DiRienzo's Fig.
3, this implied all addresses are unique on such networks (Answer 26).

4 As the Appellants argued, the Examiner's findings are not supported
5 by DiRienzo. The Examiner finds the internal network in the connection of
6 the clearinghouse computer to the imaging center which may be a local or
7 metropolitan area network in DiRienzo's Fig. 3 (Answer 3). The Examiner
8 then found the plurality of imaging modalities in the clearinghouse,
9 physician, and gatekeeper computers (*id.*). But DiRienzo describes the
10 physician and gatekeeper computers as display stations, not medical
11 diagnostic imaging stations, such as CAT or MRI scanners. The only
12 diagnostic imaging modality suggested in DiRienzo's Fig. 3 is the imaging
13 center, and there are no details to describe whether there are plural devices
14 connected in an internal network within that center. DiRienzo does not
15 describe multiple medical diagnostic imaging devices connected in an
16 internal network, but only shows an imaging center connected to a
17 clearinghouse computer (FF 04).

18 The Examiner then found the data communications control system
19 was obviated rather than present in DiRienzo (Answer 27). DiRienzo shows
20 the link from the remote computers to the clearinghouse computer as modem
21 linked communication channels (FF 03). This does not describe a data
22 communications control system that distributes data to individually
23 addressed clients in an internal network from a remote system (FF 05).

24 Remaining independent claims 17, 32, 46, and 46 require a plurality
25 of medical diagnostic imaging modalities coupled on an internal network,
26 and thus we do not sustain the rejection of those claims for the reasons set

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1 forth above. All of the dependent claims carry these limitations in them by
2 virtue of incorporating the limitations of the independent claims, and their
3 rejections are also in error. The Appellants have sustained their burden of
4 showing that the Examiner erred in rejecting claims 1-3 and 5-60 under 35
5 U.S.C. § 103(a) as unpatentable over DiRienzo.

6

7 CONCLUSIONS OF LAW

8 The Appellants have sustained their burden of showing that the
9 Examiner erred in rejecting claims 1-3 and 5-60 under 35 U.S.C. § 103(a) as
10 unpatentable over the prior art.

11 DECISION

12 To summarize, our decision is as follows:

13 • The rejection of claims 1-3 and 5-60 under 35 U.S.C. § 103(a) as
14 unpatentable over DiRienzo is not sustained.

15

16 REVERSED

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